

PATENT COOPERATION TREATY

WO 99/02064
PCT/CZ98/00030

PCT

From the INTERNATIONAL BUREAU

**NOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES**

(PCT Rule 47.1(c), first sentence)

To:
REICHEL, Pavel
P.O. Box 52
111 21 Praha 1
RÉPUBLIQUE TCHÈQUE

Date of mailing (day/month/year) 21 January 1999 (21.01.99)		
Applicant's or agent's file reference 2584/1 BLAZEK		IMPORTANT NOTICE
International application No. PCT/CZ98/00030	International filing date (day/month/year) 09 July 1998 (09.07.98)	
Priority date (day/month/year) 10 July 1997 (10.07.97)		
Applicant BLAZEK, Dalibor		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:
AU, BR, CA, CN, EP, JP, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:
DE, HU, MX, NZ, PL, RU, SI, SK, TR, UA

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 21 January 1998 (21.01.99) under No. WO 99/02064

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. (41-22) 740.14.35</p>	<p>Authorized officer J. Zahra</p> <p>Telephone No. (41-22) 338.83.38</p>
---	--

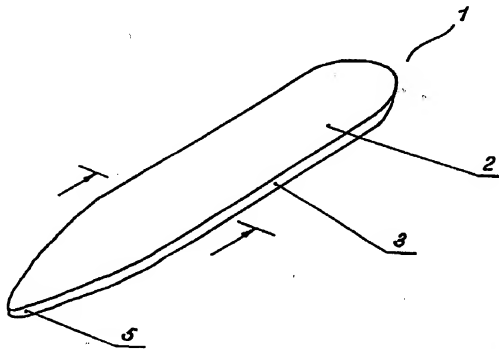
PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A45D 29/04	A1	(11) International Publication Number: WO 99/02064 (43) International Publication Date: 21 January 1999 (21.01.99)
(21) International Application Number: PCT/CZ98/00030 (22) International Filing Date: 9 July 1998 (09.07.98) (30) Priority Data: PUV 6936-97 10 July 1997 (10.07.97) CZ (71)(72) Applicant and Inventor: BLAŽEK, Dalibor [CZ/CZ]; Olbrachťova 600/II, 290 01 Poděbrady (CZ). (74) Agent: REICHEL, Pavel; P.O. Box 52, 111 21 Praha 1 (CZ).	(81) Designated States: AU, BR, CA, CN, DE, DE (Utility model), HU, JP, MX, NZ, PL, RU, SI, SK, TR, UA, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. With amended claims and statement.	

(54) Title: FILE, PARTICULARLY NAIL FILE

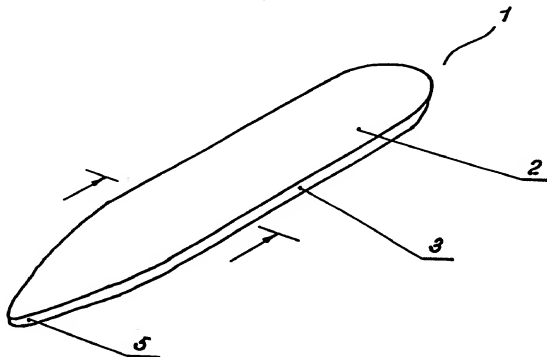


(57) Abstract

The file, the body (1) of which is provided on at least part of its surface (2) with a roughness varying from 10 to 100 μm , is made of flat, pressed or hardened glass. The file can have a variety of geometrical shapes and cross sections.

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A45D 29/04	A1	(11) International Publication Number: WO 99/02064 (43) International Publication Date: 21 January 1999 (21.01.99)
(21) International Application Number: PCT/CZ98/00030 (22) International Filing Date: 9 July 1998 (09.07.98) (30) Priority Data: PUV 6936-97 10 July 1997 (10.07.97) CZ (71)(72) Applicant and Inventor: BLAŽEK, Dalibor [CZ/CZ]; Olbrachtova 600/II, 290 01 Poděbrady (CZ). (74) Agent: REICHEL, Pavel; P.O. Box 52, 111 21 Praha 1 (CZ).	(81) Designated States: AU, BR, CA, CN, DE, DE (Utility model), HU, JP, MX, NZ, PL, RU, SI, SK, TR, UA, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>With amended claims and statement.</i>	

(54) Title: FILE, PARTICULARLY NAIL FILE**(57) Abstract**

The file, the body (1) of which is provided on at least part of its surface (2) with a roughness varying from 10 to 100 μm , is made of flat, pressed or hardened glass. The file can have a variety of geometrical shapes and cross sections.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakhstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

File, particularly nail file**Field of the invention**

The invention involves a file, particularly for nails, manufactured from glass.

Description of the prior art

Nail files, which are among the principal components of the various sets of cosmetic equipment, are at the present time manufactured from various metals or their alloys, from paper or fabric with a rough finish, as the case may be. Since files destined for such purposes are often used in an environment with high humidity, for example during personal hygiene in the bathroom, it happens in some cases that they corrode or the material from which the file is made becomes moist resulting, on the one hand, in a deterioration in appearance and, on the other, a dulling of the cutting edges of the file from the effects of corrosion and humidity and, thereby, a basic loss of effectiveness. If non-corrosive materials are used in the manufacture of files, which is generally the case, then the disadvantage is the high price. The disadvantage of metal files in which the cutting edges are formed by mechanical means is also the limited "smoothness" of the file, and the fact that by mechanical means it is possible to produce only a limited degree of roughness of the abrasive surface. Likewise, it is simply not possible to produce a series of files with finely graded roughness. It is convenient, in the use of a file, that the side edges be functional, that is rough. Because metal files are flat and too thin, it is not practical to use their side edges to trim the nails.

Summary of the invention

The above disadvantages are eliminated in the file according to the invention presented here, the basis of which lies in the fact that it is made from glass roughened on at least part of its surface, with a roughness varying from 10 to 100 μm .

The advantage of such a file is its absolute resistance to the environment in which it is used. It is significant too that, given its non-corrosive properties, the abrasive surfaces can be kept clean by rinsing in water.

It is important to note here the wide range of surface roughness that can be attained, varying from the smoothest finish with a roughness of 10 μm to a roughness of around 100 μm .

The glass body of the file has an oblong board shape and has a point at one end at least. The advantage of such a shape for the glass body of the file is the ease of manipulation in use and, thanks to the point, its practical value for hand hygiene is increased.

Another advantageous solution to be noted is the fact that the glass body of the file is roughened along one whole side at least, having a V-shaped point at the end. The advantages of such a file are apparent both during use of the file and during its manufacture, when roughening of the whole surface is carried out without the need, for instance, to mask part of the surface during the roughening process by use of acid engraving for example. The point is formed in a V shape, its symmetrical shape facilitating manipulation during use of the file in either the left or the right hand.

A further advantageous feature is the fact that body of the file is roughened along one whole side at least and is ground to a sharp finish on at least one edge. The longitudinal edge formed on one side of the body of the file further increases the functional possibilities of the nail file.

It is possible to form the body of the file so that both edges are bevelled, while the bevelled edge at the end is at an oblique angle to the side edge, so that together they form a point. This variation further increases the wide range of uses for the file.

Another advantageous arrangement for the shape of the body of the file, consisting in the fact that the surface of at least one of the edges and of one end of the body of the file is also roughened, further contributes to increasing its usefulness.

To further improve performance, the edges of the body of the file are rounded. These variations in the shape of the glass file further extend its usefulness for special cases of hand hygiene.

From the point of view of production technology, it is an advantage if the body of the file can be formed from flat or pressed glass.

All the various shapes of the file can have a glass body formed from hardened glass. The advantages of such a treated glass body are its increased stability and particularly increased safety in the event of breakage of the whole of the glass body by dropping etc. The hardening of the glass-bodied file gives it properties which are well-known in such treated glass.

Brief description of the drawings

The invention can be better described by means of the drawings, of which Figure 1 represents an „axonometric overview of the glass body of the file. Figure 2 presents a cross section of the glass body of the file with roughening on one surface. Figure 3 also shows a cross section of the glass body of the file with roughening on one side and rounded edges. Similarly, Figure 4 presents a cross section of the glass body of the file, both of whose edges are bevelled.

Description of the preferred embodiments

The file according to Figure 1 is formed from a glass body 1, shown here in oblong board shape, with a roughening 4 on the surface 2. The roughening 4 is produced by a wide variety of techniques, the choice depending upon the degree of roughness. To produce the smoothest finish, for example around 10 µm, a chemical process can be used, such as acid engraving with a hydrogen fluoride solution. Greater roughness, of around 100 µm for instance, can be produced mechanically, by sanding for example. Figure 2 shows a cross section of the glass body 1 of the file illustrated in Figure 1, with a roughened finish 4 along the whole of one surface 2.

Figures 3 and 4 illustrate further possible variants on the glass body 1 of the oblong board-shaped file. A cross section is shown of the glass body 1 of the file, with roughening 4 of one surface finish 2, the glass body 1 of the file having rounded edges 3, while the cross section in Figure 4 presents the glass body 1 of the file with edges 3 bevelled to a sharp finish, the glass body 1 of the file having a rough finish 4 on both surfaces 2.

Industrial use of the invention

The glass-bodied file has been described from the point of view of its use as a nail file. This example of use, however, in no way excludes further possible uses in other fields, particularly given the wide range of roughness which can be achieved in the glass-bodied file. A file produced according to this invention with a low degree of roughness, that is to say the finest, can be used in polishing surfaces, for example, while the coarsest can be used for grinding.

CLAIMS

1. A file, particularly a nail file, **characterized by the fact that** the body (1) of the file is made of glass and is roughened on at least part of its surface (2), with a roughness varying from 10 to 100 μm .
2. A file according to claim 1, **characterized by the fact that** the body (1) of the file has an oblong board shape and at least at one of its ends a point (5).
3. A file according to claims 1 or 2, **characterized by the fact that** the body (1) of the file is roughened at least along the whole of one side, while the point (5) at the end is V-shaped.
4. A file according to claims 1 or 2, **characterized by the fact that** the body (1) of the file is roughened at least along the whole of one side and is bevelled to a sharp finish on at least one edge (3).
5. A file according to claim 4, **characterized by the fact that** both edges (3) and at least one end of the body (1) of the file are bevelled, while the bevelled edge at the end is at an oblique angle to the side edge, so that together they form a point.
6. A file according to claim 4, **characterized by the fact that** the surface of at least one of the edges (3) and of one end of the body (1) of the file is also roughened.
7. A file according to claim 4, **characterized by the fact that** the edges (3) are rounded.
8. A file according to any of the above claims 1 to 7, **characterized by the fact that** the body (1) of the file is made of flat glass.
9. A file according to any of the above claims 1 to 7, **characterized by the fact that** the body (1) of the file is made of pressed glass.
10. A file according to any of the above claims 1 to 9, **characterized by the fact that** the body (1) of the file is made from hardened glass.

AMENDED CLAIMS

[received by the International Bureau on 10 December 1998 (10.12.98);
original claim 1 amended; remaining claims unchanged (1 page)]

1. A file, particularly a nail file, **characterized by the fact that** the body (1) of the file, including its surface (2), is formed of a single, integral stratum made of glass, where the abrading surface is situated on at least part of the surface (2), with a roughness varying from 10 to 100 μm .
2. A file according to claim 1, **characterized by the fact that** the body (1) of the file has an oblong board shape and at least at one of its ends a point (5).
3. A file according to claims 1 or 2, **characterized by the fact that** the body (1) of the file is roughened at least along the whole of one side, while the point (5) at the end is V-shaped.
4. A file according to claims 1 or 2, **characterized by the fact that** the body (1) of the file is roughened at least along the whole of one side and is bevelled to a sharp finish on at least one edge (3).
5. A file according to claim 4, **characterized by the fact that** both edges (3) and at least one end of the body (1) of the file are bevelled, while the bevelled edge at the end is at an oblique angle to the side edge, so that together they form a point.
6. A file according to claim 4, **characterized by the fact that** the surface of at least one of the edges (3) and of one end of the body (1) of the file is also roughened.
7. A file according to claim 4, **characterized by the fact that** the edges (3) are rounded.
8. A file according to any of the above claims 1 to 7, **characterized by the fact that** the body (1) of the file is made of flat glass.
9. A file according to any of the above claims 1 to 7, **characterized by the fact that** the body (1) of the file is made of pressed glass.
10. A file according to any of the above claims 1 to 10, **characterized by the fact that** the body (1) of the file is made from hardened glass.

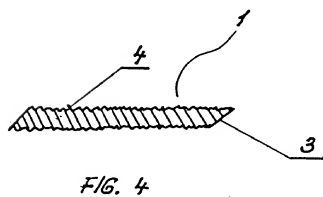
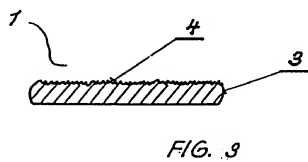
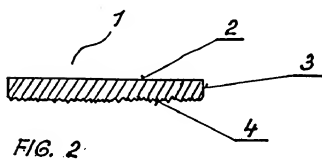
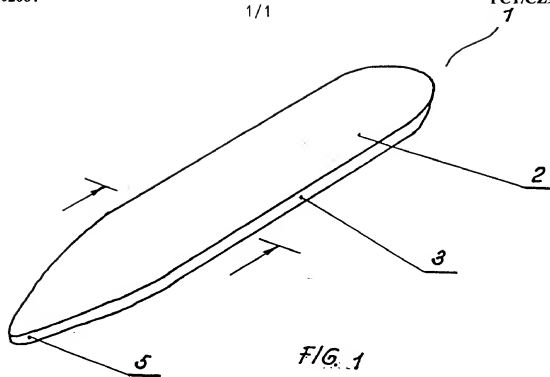
Statement under article 19 (1)

The amendment to Claim 1 reflects the principal innovative feature of the file described in International application No. PCT/CZ 98/00030, i.e. the fact that the working surface is directly formed from the same material and is an integral part of the body of the file. This feature distinguishes it from the other technical solutions cited and constitutes an inventive step qualifying the device for patent protection.

By contrast to this simple integral structure as indicated in amended Claim 1, the nail file described in US Patent No. 5,361,786 has a multi-bead glass surface attached to a substrate formed, for example, from silicone polymer. Likewise, the subject of Canadian Patent No. 2,142,949 consists of a substrate of fibreglass material with diamond particles electroplated to the top surface thereof. US Patent No. 2,699,791 involves a device formed from coated abrasive sheets bonded to thin strips of sheet metal or wood. Compared to the structural complexity of these other inventions, the technological simplicity of the invention described in Application No. PCT/CZ 98/00030 results in reduced production costs. Further important characteristics resulting from this integral structure are the good functional features and the fact that the file is absolutely resistant to the environment in which it is used.

Reference will be made to the amended claims, in a revised version of the description, by insertion of the appropriate wording in the first paragraph of the Summary of the invention, on page 1 of the Application.

The structure of the file in question is not obvious to a person skilled in the art, and consequently involves an inventive step. In our opinion, the file according to International application No. PCT/CZ 98/00030 is simpler and therefore cheaper to produce than the current multi-layer nail files. Its present absence from the market is a further indication that the structure of the file is not obvious



INTERNATIONAL SEARCH REPORT

International Application No
PCT/CZ 98/00030

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A45D29/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A45D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CA 2 142 949 A (GODBOUT GINETTE) 28 July 1996 see page 2, line 30 - page 6, line 11; figures 1,2 ---	1-7
X	US 5 361 786 A (PANGBURN WILLIAM E) 8 November 1994	1
Y	see the whole document ---	4,7
Y	US 2 699 791 A (HANSEN L. A.) 18 January 1955	4,7
A	see column 1, line 4 - line 47; figures ---	2,3,6
A	US 4 422 465 A (HAGA TOMOYUKI) 27 December 1983 see abstract; figures 1,2 ---	1
	-/--	

☒ Further documents are listed in the continuation of box C

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"B" document member of the same patent family

Date of the actual completion of the international search

10 November 1998

Date of mailing of the international search report

19/11/1998

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Acerbis, G

INTERNATIONAL SEARCH REPORT

International Application No

PCT/CZ 98/00030

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 2 308 624 A (POUECH R. J.) 19 January 1943 see page 1, left-hand column, line 1 - line 25; figures 1,2 -----</p>	<p>3,5,8-10</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. Application No

PCT/CZ 98/00030

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CA 2142949 A	28-07-1996	US 5732719 A	31-03-1998
US 5361786 A	08-11-1994	NONE	
US 2699791 A	18-01-1955	NONE	
US 4422465 A	27-12-1983	NONE	
US 2308624 A	19-01-1943	NONE	

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 2584/1 BLAZEK	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/CZ 98/00030	International filing date (day/month/year) 09/07/1998	(Earliest) Priority Date (day/month/year) 10/07/1997
Applicant BLAZEK, Dalibor		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).

2. ☐ Unity of invention is lacking (see Box II).

3. ☐ The international application contains disclosure of a **nucleotide and/or amino acid sequence listing** and the international search was carried out on the basis of the sequence listing

☐ filed with the international application.

☐ furnished by the applicant separately from the international application.

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ Transcribed by this Authority

4. With regard to the **title**, ☒ the text is approved as submitted by the applicant

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is:

Figure No. 1 ☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A45D29/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A45D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CA 2 142 949 A (GODBOUT GINETTE) 28 July 1996 see page 2, line 30 - page 6, line 11; figures 1,2 ---	1-7
X	US 5 361 786 A (PANGBURN WILLIAM E) 8 November 1994 see the whole document ---	1
Y	---	4,7
Y	US 2 699 791 A (HANSEN L. A.) 18 January 1955 see column 1, line 4 - line 47; figures ---	4,7
A	---	2,3,6
A	US 4 422 465 A (HAGA TOMOYUKI) 27 December 1983 see abstract; figures 1,2 ---	1
-/--		



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

10 November 1998

Date of mailing of the international search report

19/11/1998

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2

NL - 2280 HV Rijswijk

Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

Fax: (+31-70) 340-3016

Authorized officer

Acerbis, G

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2 308 624 A (POUECH R. J.) 19 January 1943 see page 1, left-hand column, line 1 - line 25; figures 1,2 -----	3,5,8-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CZ 98/00030

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CA 2142949 A	28-07-1996	US 5732719 A	31-03-1998
US 5361786 A	08-11-1994	NONE	
US 2699791 A	18-01-1955	NONE	
US 4422465 A	27-12-1983	NONE	
US 2308624 A	19-01-1943	NONE	